



US Army Corps
of Engineers
Portland District

PUBLIC NOTICE

June 7, 2000

REGIONAL CONDITIONS AND GUIDELINES FOR NEW NATIONWIDE PERMITS

The regional conditions (RC's) described below have been approved by the U.S. Army Corps of Engineers, Division Engineer (DE) on June 2, 2000 and become effective on June 7, 2000. The decision documents for the RC's were also signed by the DE and are available upon request at the Portland District Office. Guidelines have also been developed that will be used as the basis for "case-by-case" conditions, provided for in the Nationwide Permit program announced on March 9, 2000.

On March 9, 2000, the Corps published a notice in Part III of the Federal Register (65 FR 12818 – 12899) announcing the issuance of five new Nationwide Permits (NWP's), the modification of six existing NWP's, the modification of nine NWP general conditions, and the adoption of two new NWP general conditions. These NWP's are activity-specific and authorize certain activities in non-tidal waters of the United States that have minimal adverse effects on the aquatic environment. The new NWP general conditions limit the use of certain NWP's in designated critical resource waters and waters of the United States within 100-year floodplains and limit the use of most NWP to 1/2 acre.

The RCs and guidelines provide additional protection for the aquatic environment, by ensuring that the NWP's authorize only those activities with minimal adverse effects on the aquatic environment. They will help ensure protection of high value waters within the District. The guidelines were also developed in response to public comment and will also be used to assure minimal impacts. The guidelines can be accessed at our web site <http://www.nwp.usace.army.mil/op/g/regulatory.htm>

The March 9, 2000 Federal Register notice is available at the District office Robert Duncan Plaza (8th Floor) 333 SW 1st Avenue, Portland Oregon, or on the Internet at: <http://www.usace.army.mil/inet/functions/cw/cecwo/reg/>. As an alternate, World Wide Web users can access the Federal Register through the U.S. Government Printing Office at http://www.access.gpo.gov/su_docs/aces/aces140.html. A copy of the Federal Register can also be obtained by calling the office at (503) 808-4386.

I. REGIONAL CONDITIONS FOR NEW AND MODIFIED NATIONWIDE PERMITS
(COE) = Corps Regional condition), 401 = Water Quality Condition, CZM = A State Coastal Zone Management Act condition.

3. Maintenance Activities.

Repair of damaged bank protection, described in paragraph 3. (iii) of the NWP, will require a Pre-Construction Notification (PCN) within 4 months of the damage. (COE)

4. Fish & Wildlife Harvesting, Enhancement, and Attraction Devices.

A PCN is required that must identify potential impacts of the proposed/harvest cultivation operation on submerged beds of aquatic vegetation and will include a delineation of the affected beds.

7. Outfall Structures and Maintenance.

Individual coastal zone consistency concurrence must be obtained for any project located in estuarine or ocean waters in the coastal zone. Coastal zone concurrence is granted for all other locations in the coastal zone area after individual 401 Certification is obtained from the DEQ. (401/CZM)

12. Utility Line Activities.

- (a) Fish habitat and passage shall be protected by ensuring that the work does not create an impediment to fish passage and that there is no change to stream gradients. (COE)
- (b) Heavy equipment shall not be operated in the waters of a flowing stream unless specifically authorized. On tribal lands, coordination of exceptions will be directly with EPA. (COE)
- (c) Installation of new sewer lines or new sewer line extensions outside an urban growth boundary or unincorporated community boundary requires and individual water quality certification and/or individual coastal zone concurrence (for projects in estuarine portions of the coastal zone), (401/CZM)

13. Bank Stabilization

- (a) There shall be no change to stream gradients.
- (b) Riprap material shall be clean, durable, or angular rock which is predominantly coarse or heavy duty material. Filter fabric is to be placed under the riprap where the surface on which it is placed would otherwise leach or erode into the water.
- (c) The use of other materials for bank stabilization, such as broken concrete, asphalt, tires, wire, and steel posts, are not authorized.
- (d) Heavy equipment shall not be operated in the active flowing stream, unless specifically authorized. On tribal lands coordination of exceptions will be conducted directly with EPA
- (e) A PCN/joint Corps/DSL permit application is required when projects exceed 250 ft. in length.

14. Linear Transportation Crossings.

Road crossings and/or bridges shall have structures/features that direct drainage into biofiltration swales to prevent erosion of soil into the waterway and to minimize the pollutants entering streams and wetlands. Alternative methods where space for such features is lacking will require an individual 401 Water Quality certification (COE/401)

27. Stream & Wetland Restoration Activities.

39. Residential, Commercial, and Institutional Developments.

Developments with golf course or expanded ski areas will require an individual water quality certification. (401)

40. Agricultural Activities.

41. Reshaping Existing Drainage Ditches.

Drainage ditches that are determined by the Corps to be abandoned do not qualify for this permit. (COE)

42. Recreational Facilities.

New or expanded golf courses or expanded ski areas will require an individual state water quality certification.

43. Stormwater Management Facilities.

44. Mining Activities.

II. GENERAL REGIONAL CONDITIONS FOR OREGON (1-7 are Corps regional conditions applicable to all NWP activities)

1. **IN-WATER WORK PERIODS.** All in-water work, including temporary fills or structures, shall occur between _____ and _____. Exceptions to these recommended time periods require specific approval from the Corps. On tribal lands the Corps will coordinate exceptions to the timing guidelines with the EPA.

2. **FISH PASSAGE.** Nationwide permit activity affecting “waters of the U.S.” must not restrict the passage of aquatic life. Activities that require the placement of culverts, diversion structures, or changes to the channel morphology must be designed to be consistent with passage standards developed by ODFW and NMFS entitled, ODFW Standards and Criteria for Stream Road Crossings.

3. **FEDERAL THREATENED & ENDANGERED SPECIES.** If at any time during the conduct of work authorized, the permittee becomes aware that a Federally listed threatened or endangered species (as identified under the Federal Endangered Species Act) or the habitat of such species may be affected, the permittee must notify the Corps.

4. **FISH SCREENING.** Where applicable, fish screening will meet the current standards developed by the National Marine Fisheries Service or the Oregon Department of Fish & Wildlife, as appropriate.

5 **CULTURAL RESOURCES & HUMAN BURIALS.** If at any time during the conduct of work authorized, the permittee or agent(s) discovers that human burials, cultural resources, or historic properties (as identified by the Federal Historic Preservation Act) may be affected, they must notify the Corps.

6. **INSPECTION OF PERMIT AREA.** To ensure that the nationwide permit terms and conditions are met, the permittee must allow representatives of the Corps to inspect the authorized activity. Personnel from ODEQ and DLCD are considered to be authorized “representatives” for 401 water quality or Coastal Zone inspections. For tribal land projects, EPA is considered an authorized

representative. A request for access to the site will normally be made sufficiently in advance to allow a property owner or representative to be on site with the agency representative making the inspection.

7. SALE OF PROPERTY/TRANSFER OF PERMIT. If you sell the property associated with this permit, you must transfer the permit to the new owner(s) and obtain their signature(s). A copy of this permit with new owner(s) signature shall be sent to this office to validate the transfer of this permit authorization

Guidance and Definitions for the U.S. Army Corps of Engineers, Portland District Regional Conditions.

The subjects listed below comprise many of the factors and considerations the Corps of Engineers, Portland District (Corps) must make in order to assure that the work that is being verified or permitted satisfies the “minimal impacts” threshold. These same considerations may also be factored into individual permit decisions. Some of the categories below contain permit condition language that may be included in a Nationwide permit (NWP) verification. In order to avoid unnecessary regional conditioning not appropriate for boiler plate inclusion with all NWPs permit, guidance is provided in this appendix that Portland District will apply on a case by case basis.

1. STATE AND LOCAL PERMITS. Projects in Oregon that have been verified under any nationwide permit remain subject to local comprehensive plans and their associated implementing ordinances. Verified NWPs usually are subject to the statutes of Oregon’s Removal-Fill Law, administered by the Oregon Division of State Lands that also requires permits for placement of fill in wetlands and waters of the State. NWP verification letters will remind permittees that work cannot begin until local and State authorizations have been obtained.
2. IN-WATER WORK PERIODS: All in-water work, including temporary fills or structures, will generally occur within the ODFW recommended period for in-water work (as specified in the most current version of Oregon Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Resources). Exceptions to these recommended time periods require specific approval from the Corps permit project manager who will consult with Federal and/or State fisheries agencies as necessary to substantiate the Corps decision. On tribal lands the Corps will coordinate exceptions to the timing guidelines with the EPA.
3. MITIGATION, RIPARIAN VEGETATION PROTECTION & RESTORATION. Permittees may find permit condition language that requires that riparian, wetland, and shoreline vegetation in the permit area shall be protected from disturbance to maximum extent possible. Compensation for this loss, when there is unavoidable disturbance due to activities associated with the authorized work, may be required in order to prevent this impact and may be a condition of the permit. The highest priority is to replace damaged or destroyed vegetation with native plants that will form a wetland or wooded riparian community typical of relatively undisturbed streams and wetlands in the area. Below are considerations for our evaluation and language frequently used in permit conditions.
 - **STANDARDS**: Mitigation, when required and practical, shall replace aquatic resource functions and values lost when wetlands are filled or streams are altered. Oregon’s Guidelines for Freshwater Wetland Compensatory Mitigation is one method used to access compensation needed for freshwater wetland losses. However, guidelines cannot be used to reduce the scope and intent of Federal mitigation policy and tools, as described in National NWP General Condition C.19.
 - **MONITORING**: There must be an 80 percent survival of each plant species planted, after five years, for mitigation planting success standard to be met. Pre and post-mitigation construction color photographic documentation is required. Eighty percent cover may also be used as a success criterion

when natural revegetation is proposed. The post-mitigation photographs will be taken immediately after construction, and then annually for five years to document site characteristics, vegetation changes, and associated water and landscape features.

- **PROTECTION:** The planted areas will be temporarily fenced, or otherwise protected from damage, until the vegetation is established. Protection requires control and removal of plants that jeopardize revegetation efforts such as blackberry, scotchbroom, ivy, reedcanary grass, gorse, purple loosestrife, and other non-native and invasive plants (See item 6. below).

4. **SPECIAL AREAS OF CONCERN.** In order to insure that only minimal impacts will occur in the Special Areas of Concern (SAC), they are listed below as a means to describe natural resources that will require a careful evaluation to assure that the ‘minimal impacts’ will not be exceeded minimal. Some the wetland types are difficult to replace and/or are rare.

- (1) Areas that are listed as Outstanding Waters of the State under the State’s rules;
- (2) Designated “Essential Salmonid Habitat”;
- (3) Portions of the Agate Desert Vernal Pool Habitat near Medford, OR, with a habitat quality designated as Pristine, Altered, or Restorable (see Agate Desert Vernal Pool Habitat: Preliminary Mapping and Assessment, July 31, 1997, prepared for the Oregon Division of State Lands (ODSL) by The Oregon Natural Heritage Program;
- (4) Bogs, forest and other unique wetlands (See below);
- (5) Mature forested wetlands (See below);
- (6) Areas that are designated Significant Natural Resources in local plans developed to comply with Oregon’s Land Use Policies for Goal 5 (Open Space/Natural Resource Lands), Goal 15 (Willamette River Greenway), 16 (Estuarine Resources); or Goal 17 (Coastal Shorelands).

5. **Bogs, forests, and other unique wetlands.** Portland will give special consideration to the functions and values that are associated with unique wetlands as described in Appendix G of Oregon’s Freshwater Assessment Methodology (OFWAM) and make regulatory decisions that do not further degrade or fragment these habitats. Wetlands types with a S1 indicate the habitats are critically imperiled and those with a S2 are imperiled due to their rarity (Less than 6-20 documented occurrences).

Palustrine aquatic bed: freshwater

Myriophyllum hippuroides - G5S2 Western water-milfoil bed

Scirpus subterminalis - G3S1 Water clubrush bed

Palustrine emergent wetland: serpentine fens

Darlingtonia californica - G2S2 Darlingtonia serpentine fen

Palustrine emergent wetland: alkaline marshes and playas

Carex douglasii-Deschampsia cespitosa - G1S1 Tufted hairgrass-Douglas sedge alkaline meadow

Elymus triticoides-Poa juncifolia - GUS2 Creeping wildrye-alkali bluegrass playa

Poa nevadensis-Puccinellia lemmonii - G2S1 Nevada bluegrass-Lemmon alkaligrass playa

Palustrine emergent wetland: vernal pools and snowbed depressions

Alopecurus saccatus-Plagiobothrys - GUS2 Foxtail-popcorn flower vernal pool

Danthonia unispicata-Deschampsia danthonioides - GUS2 Oatgrass-hairgrass vernal pool

Downingia-Eleocharis - G2S2 Downingia-spikerush vernal pool

Myosurus minimus-Plagiobothrys - GUS2 Mousetail-popcorn flower vernal pool

Navarretia intertexta-Polygonum kelloggii - GUS2 Navarretia-popcorn flower vernal pool

Plagiobothrys-Veronica peregrina - GUS2 Popcorn flower-veronica vernal pool

Palustrine emergent wetland: coastal freshwater fens, marshes, and deflation plains
Calamagrostis nutkaensis - G3S1 Pacific reedgrass fen

Palustrine emergent wetland: low-to mid-elevation western Oregon fens, marshes

Carex aperta - G1S1 Columbia sedge marsh

Carex unilateralis-Hordeum brachyantherum - G2S2 One-sided sedge-meadow barley marsh

Deschampsia cespitosa (interior valley association) - G2S2 Tufted hairgrass prairie

Ludwigia palustris-Polygonum hydropiperoides - G2S2 Water purslane-waterpepper marsh

Sagittaria latifolia - G4S2 Wapato marsh

Palustrine emergent wetland; montane fens, etc.: spikerush dominated

Eleocharis pauciflora/Hamatocaulis vernicosus - G3S2 Few-flowered spikerush/brown moss fen

Palustrine scrub-shrub wetland: serpentine fens

Rhododendron occidentale/Camassia quamash - G2S2 Western azalea/camas shrub swamp

Palustrine scrub-shrub wetland: coastal shrub swamp, bog and brush prairie

Ledum glandulosum/Sphagnum - G2S2 Labrador-tea/sphagnum bog

Ledum glandulosum/Darlingtonia californica/Sphagnum - G2S2 Labrador-tea/darlingtonia/sphagnum bog

Ledum glandulosum-Myrica gale - G1S1 Labrador tea-sweet gale heath

Vaccinium uliginosum/Deschampsia cespitosa - G2S2 Coastal bog blueberry/tufted hairgrass brush prairie

Palustrine scrub-shrub wetland: low- to mid-elevation western Oregon shrub swamp, brush prairie and riparian

Rosa nutkana/Oenanthe sarmentosa - G2S2 Nootka rose/water parsley shrub swamp

Rosa nutkana/Deschampsia cespitosa - G2S2 Nootka rose/hairgrass brush prairie

Salix geeyeriana-Salix piperi - G1S1 Geyer willow-Piper willow shrub swamp

Salix lasiandra/Urtica dioica - G3S2 Pacific willow shrub swamp

Salix piperi-Salix sitchensis - G2S2 Piper willow-Sitka willow shrub swamp

Vaccinium caespitosum - G3S1 Dwarf blueberry brush prairie

Palustrine scrub-shrub wetland: montane (Cascade and eastern Oregon) shrub swamp and riparian

Salix boothii-Salix drummondiana - G3S1 booth willow-Drummond willow shrub swamp

Salix boothii-Salix eastwoodiae - G3S2 Booth willow-mountain willow riparian

Salix boothii-Salix lemmonii - G3S2 Booth willow-Lemmon willow riparian

Salix drummondiana - G3S1 Drummond willow shrub swamp

Salix geeyeriana-Salix lemmonii - G3S2 Geyer willow-Lemmon willow riparian

Salix geeyeriana-Salix rigida - G3S2 Geyer willow-rigid willow riparian

Vaccinium occidentale/Sphagnum fuscum - G1S1 Bog blueberry/sphagnum shrub swamp

Palustrine scrub-shrub wetland: low- to mid-elevation eastern Oregon riparian

Salix amygdaloides-Salix exigua - G3S2 Peachleaf willow-coyote willow

Salix exigua - G3S2 Coyote willow riparian

Salix exigua-Salix lasiandra - G3S2 Coyote willow-Pacific willow riparian

Salix exigua-Salix rigida - G3S2 Coyote willow-Pacific rigidwillow riparian

Salix lasiandra-Rosa Woodsii - G3S2 Pacific willow-Woods rose riparian

Salix rigida-Ribes aureum - G3S2 Rigid willow-golden currant riparian

Palustrine forested wetland: serpentine fens and riparian

Chamaecyparis lawsoniana/Rhododendron occidentale/Darlingtonia californica - G2S2 Port Orford cedar-western azalea/darlingtonia riparian

Palustrine forested wetland: coastal swamps and muskeg

Picea sitchensis/Cornus stolonifera - G3S1 Old-growth Sitka spruce/creek dogwood tideland swamp

Picea sitchensis/Rubus spectabilis/Lysichitum americanum - G3S1 Old-growth Sitka spruce/salmonberry/skunkcabbage swamp

Pinus contorta/Carex obnupta - G2S1 shore pine/slough sedge vernal pool

Pinus contorta-Thuja plicata/Ledum glandulosum - G3S1 Shore pine-red cedar/Labrador tea muskeg

Palustrine forested wetland: low- to mid-elevation western Oregon swamps and riparian

Fraxinus latifolia/Urtica dioica - G3S2 Oregon ash/nettle woodland

Thuja plicata/Lysichitum americanum - G3S1 Old-growth red cedar/skunk cabbage swamp

6. MATURE FORESTED SYSTEMS. These may require case-by-case protection measures.

A mature forested system meets one or more of the following conditions:

- (a) 50 percent or more of the upper forest canopy consists of evergreen trees older than 80 years or deciduous trees older than 50 years; or
- (b) 50 percent of the forest canopy consists of trees taller than 50 feet, and the structural diversity is high, characterized by a multi-layer community of trees >50 feet tall and trees 20-49 feet tall and shrubs and herbaceous groundcover; or
- (c) <25 percent of the cover in the herbaceous layer or shrub class are invasive exotic plants listed below.

7. SUPPLEMENTAL BUFFER GUIDELINES: Applicants are advised that we may need to apply the following buffer guidelines for the protection of wetland functions and values, for Water Quality Management Plans, and/or for the protection of any of the natural resources listed as SAC.

High sensitivity/High potential impact	200 foot buffer
High sensitivity/moderate potential impact	150 foot buffer
High sensitivity/low potential impact	100 foot buffer
Medium sensitivity/High potential impact	100 foot buffer
Medium sensitivity/moderate potential impact	75 foot buffer
Medium sensitivity/low potential impact	50 foot buffer
Low sensitivity/High potential impact	50 foot buffer
Low sensitivity/moderate potential impact	30 foot buffer
Low sensitivity/low potential impact	25 foot buffer

8. VEGETATED BUFFERS: Vegetated buffers may be required whenever needed to reduce the

impacts upon waters or wetlands caused by the project's impacts. Buffer width will be established commensurate with aquatic resources effected (e.g. fish and wildlife, water quality, etc.) and may include wetlands and/or uplands. Significant Areas of Concern will generally always require the most comprehensive effort to establish a buffer width.

9. BIOENGINEERING TECHNIQUES. Appropriate, bioengineering techniques may be the preferred method for preventing erosion in many situations, especially since the number of fish species listed under ESA has markedly increased and the Oregon has identified and mapped certain stream reaches as "Essential salmonid habitat". Many such techniques are described in Guidelines On Riparian Restoration: Bioengineering, ODSL. Resolution of NWP verification issues related to bank protection design usually can be addressed with fish habitat enhancement measures being incorporated into the design, such as willow sprigs in rock applications, fish resting areas, reducing or eliminating the use of rock in the upper portions of the stabilization area and using vegetative stabilization. Compatible land use management practices and non-structural techniques of bank stabilization are preferred and changes to some practices may be needed to address future erosion problems.

10. MITIGATION SITES: Any activity or work authorized under these NWPs shall not have more than minimal impacts on previously required federal or state mitigation or restoration efforts. The applicant's actions must provide for impacts in such areas in the mitigation plan and adjacent landowner(s) should be contacted to assure they understand how the work will be conducted so that "minimal impacts" requirement of the Nationwide permit will be satisfied.

11. DEED RESTRICTIONS. The Corps permit is usually a sufficient legal means to achieve certainty that waters, wetland buffers, and associated mitigation are protected. On a case by case basis, especially if the property may be sold, the Corps may choose to accept or require protection by deed restriction, covenant or enforceable legal agreement. This means will be used to insure that impacts are minimal and may also be used as a tool for individual permits. This requirement usually will be conveyed in a NWP verification cover letter.

12. CULTURAL RESOURCES & HUMAN BURIALS. Portland District strongly recommends that activity in the vicinity of the discovery immediately cease as a matter of practicality and respect for the human remains. This action, however, is voluntary. In the matter of Tribal interests, as provided for in 33 USC 325 Part C 11 & 14, we will initiate emergency coordination efforts with the appropriate Tribe, wherein the Tribe has agreed to respond within 48 hours in order for the Corps to reach a decision to suspend, modify or revoke the permit.

13. INVASIVE/NON-NATIVE PLANT LIST (Next page)

SCIENTIFIC NAME	COMMON NAME
<i>Agropyron repens</i>	Quackgrass
<i>Arcticum minus</i>	Burdock
<i>Bromus tectorum</i> , <i>B. rigidus</i> , <i>B. Brizaeformis</i> , <i>B. secalinus</i> , <i>B. japonicus</i> , <i>B. mollis</i> , <i>B. commutatus</i>	Bromes
<i>B. inermis</i> , <i>B. erectus</i> <i>cenchrus longispinus</i>	Sandbur
<i>Centaurea solstitialis</i> , <i>C. repens</i> , <i>C. cyanus</i> , <i>C. maculosa</i> , <i>C. diffusa</i>	Knapweeds
<i>Circlium vulgare</i> , <i>C. arvense</i>	Thistles
<i>Cynosursus cristasus</i> , <i>C. echinatus</i>	Dogtail
<i>Cytisus scoparius</i>	Scot's Broom
<i>Dactylis glomerata</i>	Orchardgras
<i>Dipsacus sylvestris</i>	Teasel
<i>Digitaria sanguinalis</i>	Crabgrass
<i>Echinochloa crusgalli</i>	Branyard Grass
<i>Elaeagnus augustifolia</i>	Russian Olive
<i>Euphorbia peplus</i> , <i>E. esula</i>	Spurge
<i>Festuca arundinacea</i> , <i>F. pratensis</i>	Fescue
<i>Helix hedra</i>	English ivy
<i>Holcus lanatus</i> , <i>H. mollis</i>	Velvet Gress
<i>Hordeum jubatum</i>	Foxtail Barley
<i>Hypericum perforatum</i>	St. John's Wort
<i>Iris pseudacorus</i>	Yellow Iris
<i>Lolium perenne</i> , <i>L. multiflorum</i> , <i>L. temulentum</i>	Ryegrass
<i>Lotus corniculatus</i>	Birdsfoot Trefoil
<i>Lythrum salicaria</i>	Purple Loosestrife
<i>Matricaria matricarioides</i>	Pineapple Weed
<i>Medicago sativa</i>	Alfalfa
<i>Melilotus alba</i> , <i>M. officinalis</i>	Sweet Clover
<i>Phalaris arundinaceae</i>	Reed Canarygrass
<i>Phleum pratense</i>	Timothy
<i>Phragmites australis</i>	Reed Canarygrass
<i>Poa compressa</i> , <i>P. palustris</i> , <i>P. pratensis</i>	Bluegrass
<i>Polygonium aviculare</i> , <i>P. convolutus</i> , <i>P. cuspidatum</i> , <i>P. lapathifolium</i> , <i>P. persicaria</i>	Knotweeds
<i>Ranunculus repens</i>	Creeping Buttercup
<i>Rubus discolor</i> , <i>R. laciniatus</i> , <i>R. vestitus</i> , <i>R. macrophyllus</i>	Non-native Blackberries
<i>Salsola kali</i>	Russian Thistle
<i>Setaria viridis</i>	Green Bristlegrass
<i>Sisymbrium altissimum</i> , <i>S. ioeslii</i> , <i>S. officinale</i>	Tumblemustards
<i>Tanacetum vulgare</i>	Tansy
<i>Trifolium dubium</i> , <i>T. pratense</i> , <i>T. repens</i> , <i>T. arvense</i> <i>T. subterraneum</i> , <i>T. hybridum</i>	Clovers
Cultivated sepcies:	Wheat, corn, Barley, rye, etc.
There has to be at least 0.25 acre of the Forested class that meets the size and age criteria. The size of trees is often not a measure of age, and size cannot be used as a surrogate for age. To determine age, the best methods are to use a trees corer or to gather historical data (e.g. aerial photos, land use records, permits, etc.) to determine when the area was last logged.	